

South Carolina Department of Health and Environmental Control

GENERAL CONDITIONAL MAJOR OPERATING PERMIT (GCMP-04)

CONCRETE BATCH PLANTS

In accordance with the provisions of the Pollution Control Act, Sections 48-1-50(5) and 48-1-110(a), and the 1976 Code of Laws of South Carolina, as amended, Regulation 61-62, the above mentioned sources are hereby granted permission to discharge air contaminants into the ambient air. The Bureau of Air Quality authorizes the operation of these sources in accordance with the plans, specifications and other information submitted in the General Conditional Major permit application. Sources operating under this general permit wish to limit their potential to emit as defined in South Carolina Air Pollution Control Regulation 61-62.1.

This permit is subject to and conditioned upon the terms, limitations, standards, and schedules contained in or specified on the attached pages of this permit.

Permit Number: GCMP04-xxxx-xxxx

Issue Date: [DATE] Expiration Date: [DATE]

Director, Engineering Services Division Bureau of Air Quality

General Conditional Major Operating Permit (GCMP-04) Concrete Batch Plants

Permit Number: GCMP04-<PERMIT_NUMBER>

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General Conditional Major Operating Permit (GCMP-04) Concrete Batch Plants

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PART 1.0 APPLICABILITY

A. GENERAL APPLICABILITY

Condition Number	Condition
1.A.1	In accordance with this general conditional major permit, a concrete batch plant and/or concrete block plant may operate under the conditions contained herein if it is comprised of one or any combination of the following: Boilers or other fuel combustion devices less than or equal to 30 x 10 ⁶ BTU per hour, storage of sand and aggregate, sand and aggregate transfer to elevated bin, cement and/or flyash unloading to elevated storage silo, weigh hopper loading, central mixer loading, and/or truck loading, and the loading, transfer or storage associated with emission control systems. Facilities operating under this permit seek to limit their potential to emit to below the thresholds which define a major source by complying with federally enforceable conditions contained in the permit.

B. CRITERIA

Condition Number	Condition		
1.B.1	 This general permit applies to concrete batch and/or block plant facilities meeting all of the following criteria: The facility is limited to concrete batching operations only. The plant produces no more than 6,657,600 cubic yards of concrete per rolling year (12 month rolling sum). The maximum size for a single boiler or multiple boilers in operation at one time is limited to less than or equal to 30 million BTU/hr heat capacity input. Fuel combustion sources at the facility are limited to natural gas, propane, liquefied petroleum gas, virgin fuel oil or spec oil (to a maximum of 0.5 weight % sulfur). The operational restrictions of the facility limit its potential to emit to below major source thresholds. Specifically, potential for SO₂, PM₁₀, and NO_x emissions are less than 100 tons per year and hazardous air pollutant (HAP) emissions are less than 10 tons per year individually or 25 tons per year combined. 		

PART 2.0 STANDARD CONDITIONS

The following conditions are applicable unless superseded by special permit condition(s): All conditions marked with an asterisk shall be considered federally enforceable.

Condition Number	Condition	
2.1	Permit expiration terminates the source's right to operate unless a complete renewal application has been submitted by the application renewal date. Upon Bureau receipt of an application for renewal, the source may continue to operate subject to final action by the Department on the renewal application	
2.2	An operating permit modification or renewal may be issued upon evidence of satisfactory operation during the prior operating period and receipt of a complete application.	
2.3	This general permit has been issued based on information submitted by the owner/operator in the application. Any false information or misrepresentation in the application may be grounds for permit revocation.	
*2.4	This general permit expressly incorporates all the provisions of SC Regulation 61-62.1, Section II.	
2.5	No deviation from the plans and specifications reflected in the permit application as submitted is allowed, unless authorized in writing by the Bureau.	

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Condition Number	Condition
2.6	This general permit only covers emission sources and control equipment while physically located at the permitted plant location. Unless the permit specifically provides for equipment relocation, this general permit is void for an item of equipment on the day it is removed from the permitted location, notwithstanding the expiration date specified on the permit.
*2.7	Whenever the ownership/operation of a facility has been transferred, the Bureau shall be notified by the new owner/operator in accordance with SC Regulation 61-62.1 Section II. A transfer of this permit will be effective upon written approval by the Department.
*2.8	In accordance with SC Regulation 61-62.1, Section II, the permittee must comply with all applicable statutes and regulations of the United States and the State of South Carolina. This permit does not relieve the permittee from compliance with applicable local laws, ordinances, and regulations. The Department may grant permission to proceed with minor alterations or additions without issuance of a permit when the Department determines that the alteration or addition will not increase the quantity and will not alter the character of the source's emissions.
*2.9	For all sources not required to have continuous emissions monitors the owner/operator shall, at all times, including periods of startup, shutdown, and malfunction, maintain and operate these sources in a manner consistent with good air pollution control practice for minimizing emissions to the maximum extent practicable. In accordance with SC Regulation 61-62.1 Section II, in the event of any malfunction of air pollution control equipment or system, process upset or other equipment failure which results in discharges of air contaminants lasting for one hour or more and which are greater than those discharges described for normal operation in the permit application shall be reported to the local Environmental Quality Control (EQC) Regional office within twenty-four (24) hours after the beginning of the occurrence. The owner/operator shall also submit a written report within thirty (30) days of the occurrence. This report shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality (BAQ). The report shall contain at a minimum, the following: the identity of the emission point and associated equipment where excess emissions occurred, the magnitude of excess emissions, the time and duration of excess emissions, the steps taken to remedy the malfunction and to prevent a recurrence, documentation that control equipment and processes were at all times maintained and operated, to the maximum extent practicable, in a manner that was consistent with good practice for minimizing emissions. Such a report shall in no way serve to excuse, otherwise justify, or in any manner affect any potential liability or enforcement action resulting from the occurrence.
2.10	Any authorized agent of the Department, upon presentation of credentials, shall be allowed to enter the grounds of this facility during reasonable hours, to inspect any equipment required to be kept, used, calibrated, and maintained under this permit; to obtain samples of emissions; to have access to and have a right to copy records required under this permit; to photograph and use monitoring and testing equipment for the purpose of monitoring and preserving information on activities, discharges or emissions authorized by this permit.
2.11	The general permit for the facility may be reopened for cause by the Department or to include any new standard or regulation which becomes applicable to a source for which three or more years remain on the original term of the permit.
*2.12	The permittee shall pay fees in accordance with SC Regulation 61-30, SC Environmental Protection Fees.
*2.13	The permittee shall complete and submit a new updated emissions inventory, if requested, consistent with the schedule approved pursuant to SC Regulation 61-62.1, Section III. This requirement notwithstanding, an emissions inventory may be required at any time in order to determine the compliance status of any facility.
2.14	No deviation from the plans and specifications submitted with the construction permit application or the conditions specified herein is permitted, unless authorized in writing by the Department. The owner/operator is responsible for satisfactory compliance with all Air Pollution Regulations and Standards.

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requirements marked with an asterisk are considered federally enforceable.

This permit is subject to all standard conditions contained herein and to the following special conditions. **All conditions or**

A. EMISSION LIMITATIONS

Air pollutant emissions shall not exceed the following.

IDs	Pollutant/ Standard	Limit	Reference Method	Regulation	State Only
Boilers	SO_2	$0.5 \text{ lbs}/10^6 \text{ BTU}$	6	NSPS Subpart Dc	No
Boilers	Opacity	20%	9	NSPS Subpart Dc	No
Boilers	SO_2	$3.5 \text{ lbs}/10^6 \text{ BTU}$	6	SC Regulation 61-62.5 Standard 1	No
Boilers	SO_2	$2.3 \text{ lbs/}10^6 \text{ BTU}^{-1}$	6	SC Regulation 61-62.5 Standard 1	No
Boilers	PM	0.6 lbs/10 ⁶ BTU	5	SC Regulation 61-62.5 Standard 1	No
Boilers	Opacity	20%	9	SC Regulation 61-62.5 Standard 1	No
Boilers	Opacity	40% ²	9	SC Regulation 61-62.5 Standard 1	No
All Other Operations	PM	See Condition 3.(E)(16)	5	SC Regulation 61-62.5 Standard 4	No
All Other Operations	Opacity	20%	9	SC Regulation 61-62.5 Standard 4	No
All Other Operations	Opacity	40% 3	9	SC Regulation 61-62.5 Standard 4	No

Applies to all sources in Charleston County greater than 10 million BTU/hour.

³Applies to processes constructed on or prior to December 31, 1985.

Condition Number	Condition
3.A.1	The above emission limitations are derived from various Federal and State regulations that govern the operation of these sources. Operation at other than reported capacity must meet emission limits as specified in the applicable regulations based on that operating rate but shall not exceed the values reported to the Department for proof of compliance with SC Regulation 61-62.5, Standards 2, 7, and 8. All test methods must be the most recent revisions that are published in the Code of Federal Regulations as in effect on the date of this permit issuance, or otherwise approved by the Bureau.

² Applies to fuel burning operations constructed prior to February 11, 1971.

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B. CONTROL EQUIPMENT *

Condition Number	Condition		
3.B.1	The owner/operator shall, to the extent reasonably practicable, maintain and operate any source including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions. In addition, the owner/operator shall maintain a log of the time, magnitude, duration and/or any other pertinent information necessary to determine periods of startup, operation, shutdown and malfunction of a permitted facility or any periods during which a continuous monitoring system or monitoring device (if applicable) is inoperative. These records shall be maintained on site for a period of no less than five years following the event and shall be made readily available to representatives of this Department upon request.		

^{*} These conditions shall be considered federally enforceable.

C. OPERATIONAL FLEXIBILITY

Condition Number	Condition	
3.C.1	 The following operational scenarios are allowed. No further action is required by the owner/operator prior to making the changes described below: The use of a fuel oil with a lower sulfur content than what was submitted as part of the permit application. On site unit relocation, provided that the permittee has demonstrated compliance with emission limitations at the new location, specifically the limitations contained in SC Regulation 61-62.5, Standards 1, 2, 7, and 8. 	

D. EXEMPT EQUIPMENT OR PROCESSES

Condition Number	Condition		
3.D.1	 The following is a list of equipment or processes emitting regulated air pollutants which are exempt from permitting due to insignificant emissions. Fuel use in exempt equipment shall be included in facility totals. Emergency power generators of less than 150 KW rated capacity, or those which operate 250 hours per year or less and have a method to record the actual hours of use such as an hour meter. Boilers and space heaters of less than 1.5 x 10⁶ BTU/HR rated input capacity which burn virgin fuel. All storage tanks meeting the following requirements that store organic liquids with the given maximum vapor pressures, excluding those that store a hazardous air pollutant except as an impurity. Volume ≥ 40,000 gallons and Vapor pressure < 0.50psi; or 20,000 gallons ≤ tank volume < 40000 gallons and Vapor pressure< 2.2 psi Volume < 20,000 gallon. Any equipment used solely for the purpose of fire fighting. 		
1	4. Any equipment used solery for the purpose of the rightning.		

E. ADDITIONAL CONDITIONS

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Condition Number	Condition
3.E.1	The cement and/or flyash silos shall not be operated without all control devices on-line and operating.
3.E.2	The cement and flyash silo baghouse shall be inspected for leaks and visible emissions in the exhaust while the silo is being loaded.
3.E.3	Ruptured or inoperative bags shall be replaced promptly. The Permittee shall maintain an inventory of filter bags such that an adequate supply of bags are on hand to replace any defective bags in each baghouse.
3.E.4	System pressure drop gauges and cleaning cycle timers shall be installed, operated and maintained on each baghouse (excluding bin vent baghouses).
3.E.5	Loading of concrete on the trucks shall be conducted with a boot if so listed in application.
3.E.6	Inspection for proper operation of the boot shall be conducted while load-out is occurring at least once each week.
3.E.7	Fugitive emissions of PM ₁₀ must be controlled by wet suppression, chemical dust suppressants, or in any other manner which has received prior approval from this Bureau. The control of fugitive emissions shall include, but not be limited to, the property around the batch plant itself and all entrances through which motor vehicles travel.
3.E.8	Sand and aggregate piles must be kept as wet as necessary to prevent visible dust emissions.
3.E.9	Prior to the expiration date of this general conditional major operating permit, a representative of the Department may conduct a facility inspection. The findings of this inspection, past record of compliance, and future probability of compliance will be given appropriate weight in making the decision regarding permit renewal.
3.E.10	Natural gas, propane, liquefied petroleum gas, fuel oil and/or recycled oil (with prior written approval from this Department) shall be the only fuels used in boilers. Fuel oil sulfur content shall be less than or equal to 0.5 percent by weight. Documentation of fuel sulfur content must be retained on site. The use of any other substances as fuel is prohibited without prior written approval from the Bureau of Air Quality. Usage of fuel oil sulfur content higher than 0.5% may result in limits on fuel usage or require additional monitoring and/or recordkeeping.
*3.E.11	The permitted facility shall have emission limitations of less than 100 TPY for SO_2 , NO_x , PM_{10} (each pollutant) and less than 10 TPY for individual HAP or 25 TPY for HAPs in aggregate. Compliance with these limitations will be demonstrated by monitoring and reporting twelve-month rolling sums according to Conditions 3.F.1, 3.G.1, and by meeting the applicability requirements of Condition 1.B.1.
*3.E.12	Total yearly concrete production shall not exceed 6,657,600 cubic yards of concrete.
3.E.13	Facilities that have the authorization to burn recycled/waste oil as fuel shall maintain records of the following information: a. For each shipment, date and total amount of specification oil received. b. On site generated specification oil usage and dates. c. Chemical analysis of the fuel oil for total halogens, total lead, total chromium, total cadmium, total arsenic, total nickel, percent sulfur and BTU content shall be performed on each shipment, or annual sampling of on site batches shall be performed. d. Constituents for the fuel oil can not exceed those defined for "specification" oil in SC Regulation 61-62.1.
3.E.14	The use of any non-specification oil, hazardous waste, or any other waste chemical as a fuel or any addition of these items to the fuel shall not be allowed without prior written approval from the Department
*3.E.15	This facility must gain approval from this Department prior to relocation to any other site in South Carolina
3.E.16	In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section VIII - Other Manufacturing, particulate matter emissions shall be limited to the rate specified by use of the following equations: for process weight rates less than or equal to 30 tons per hour ($E = 4.10P^{0.67}$) and for process weight rates greater than 30 tons per hour ($E = 55.0P^{0.11} - 40$) where $E =$ the allowable emission rate
* Tl	in pounds per hour and $P =$ process weight rate in tons per hour.

^{*} These conditions shall be considered federally enforceable.

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Condition Number	Condition	
3.F.1	 Records of monthly concrete production in cubic yards of concrete per month including a twelve month rolling sum of concrete production. Records of monthly non-emergency generator(s) use and a twelve month rolling sum of hours of operation for non-emergency generators. Records of monthly emergency generator(s) use and a twelve month rolling sum of hours of operation for emergency generators. Records of all required monitoring data and support information must be retained on site for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. The Department must grant prior approval of any alternative method of record keeping. 	

G. REPORTING REQUIREMENTS *

Condition Number	Condition
3.G.1	The owner/operator shall submit semi-annual reports of required monthly monitoring information specified in Condition 3.F.1.(1) through 3.F.1.(2).
	Semi-annual reports are due January 30 th and July 30 th each year. All reports should be addressed to the Manager of the Technical Management Section, Bureau of Air Quality.